

California
Coastal Sediment Management
Workgroup

Initial Report

November 2000

CONTENTS

Introduction	1
Mission and Goals	1
Accomplishments and Ongoing Projects	2
Department of Boating and Waterways	2
State Coastal Conservancy	4
Department of Parks and Recreation	4
State Lands Commission	5
California Coastal Commission	5
Department of Fish and Game	6
Future Directions	7
Appendix A: The CSMW Representation and Membership	9
Federal Participation	9
State Participation	9
Local Participation	9
Appendix B: Letters Establishing CSMW in California	11
Appendix C: Mission, Goals and Objectives	15

Introduction

The California Coastal Sediment Management Workgroup (CSMW) has been established by the U.S. Army Corps of Engineers (Corps) and the California Resources Agency (Resources Agency) to facilitate regional approaches to protecting, enhancing and restoring California's coastal beaches and watersheds through federal, state and local cooperative efforts. The CSMW, a statewide effort initiated by both the Corps and Resources Agency in late 1999, is the first state and federal partnership that has been developed in California for on-going, multi-agency dialogue and interaction on statewide coastal sediment management issues, such as the use of federal/state funds and project coordination.

The Corps, the State of California, regional government agencies and local coastal communities have been addressing various elements of a coastal sediment management program for years, through studies, beach nourishment, harbor maintenance, habitat restoration and other efforts. The CSMW was formed in response to concerns raised by the Davis Administration, the Corps, and representatives of local governments. These concerns were voiced at a formal meeting in 1999 between the Resources Agency and Corps on shore protection needs in California, and have been the subject of informal discussions at various times about coastal sediment management. A broad consensus emerged that identified coastal sediment management as a key factor in the development of strategies to conserve and restore California's coastal beaches and watersheds.

The Corps participates in the CSMW as the federal agency with the mission, authority and capability to assist in managing and restoring coastal shorelines, wetlands, and watersheds. In addition, the Corps has lead federal authority for flood control, ecosystem restoration and navigation activities that provide systematic coastal sediment management linkages. The Resources Agency participates as the state "superagency" with oversight responsibilities related to conserving, enhancing and managing California's natural and cultural resources, including coastal beaches, coastal watersheds and the ocean ecosystem. Composed of multiple departments, boards, commissions, conservancies and programs, the Resources Agency includes the Ocean Resources Management Program, Department of Boating and Waterways, State Lands Commission, and State Coastal Conservancy. The CSMW is assisted by the California Coastal Coalition (CalCoast), a non-profit organization comprised of cities, counties and regional government agencies along the coast. CalCoast provides the CSMW with local feedback and updates regarding projects and studies underway in coastal communities.

In addition to the federal, state, regional and local coordination, each participant in the CSMW can use group discussions to strengthen their respective programs within the context of statewide coastal sediment management. The State agencies have used the workgroup to coordinate the development and review of projects that will be undertaken through recent state funding and bond issue programs. The CSMW provides a forum to enhance these individual efforts, minimize redundant studies and ensure that various studies are being conducted in a complementary way.

Mission and Goals

The mission of the CSMW is to facilitate regional approaches to protecting, enhancing and restoring California's coastal beaches and watersheds through federal, state and local cooperative efforts. In support of this mission, the goals of the group are to:

- Coordinate California's coastal beach and watershed restoration, protection and enhancement efforts with local, state and federal stakeholders and programs;
- Better coordinate coastal sediment management and beach nourishment activities with related ongoing coastal watershed management, habitat restoration and protection, water quality enhancement, resource sustainability, and urban waterfront planning efforts;
- Identify components necessary to develop collaborative approaches to well-conceived, environmentally-sound coastal sediment and watershed management projects; and
- Increase awareness of state and federal coastal beach and watershed protection, restoration and enhancement policies, programs and activities among local and regional governments.

There are a number of specific objectives, identified in Appendix C, the CSMW plans to pursue to achieve these goals.

Accomplishments and Ongoing Projects

The Corps has hosted regular meetings of the CSMW and has assigned top-level staff from the South Pacific Division and the San Francisco and Los Angeles districts to participate. Similarly, the Secretary for Resources has appointed the Ocean Program Manager as the State lead and directed a number of departments under the Resources Agency's purview to participate.

As needed, the Corps and Resources Agency have assigned staff to work with the CSMW to promote a thorough understanding of state and federal processes, budget actions and the legal basis for decision-making. The Corps has also provided regular updates on its ongoing projects and studies and has shared ideas from around the country on how to address various sediment management issues.

In fiscal year 2000-01, due in part to the establishment of the CSMW, the California Legislature and Governor Davis allocated significant new funding (\$10 million) for beach restoration, beach nourishment, and studies to determine ways to reduce beach erosion. The CSMW has provided California decision-makers with information to support new investment in these issues and to help attract additional funding from non-state sources.

Department of Boating and Waterways

The Department of Boating and Waterways (DBW) is California's primary agency responsible for restoring eroded beaches and protecting public coastal infrastructure. The California Public Beach Restoration Act (PBRA), sponsored by Assemblymember Ducheny and signed by Governor Davis in September 1999, created the Public Beach Restoration Program within the DBW. The mission of the program is to preserve and protect the

California shoreline by restoring and maintaining natural and recreational beach resources and minimizing economic losses caused by natural and human-induced beach erosion.

The PBRA charges the DBW with pursuing and promoting federal and local partnerships to cost-share beach restoration, nourishment, or enhancement projects. The PBRA also mandates the DBW and State Coastal Conservancy to prepare a study that details state beach restoration, nourishment and enhancement activities and needs, and that discusses ways to increase natural sand supply. At the time the PBRA became law, \$500,000 was allocated to the program.

In fiscal year 2000-01, the Governor and State Legislature appropriated \$10 million to the program. These funds are available to local, regional and state agencies and governments through a competitive application process. Successful applications will clearly demonstrate the significant state benefit of the proposed project; in addition, those projects that are coordinated with the Corps will receive priority funding. The DBW has used the CSMW since inception for discussing potential restoration projects. Some of the projects under discussion are:

- Ocean Beach Feasibility Study: some form of shore protection for the Great Highway, in partnership with the City/County of San Francisco.
- Los Angeles County Coast of California Study: to determine baseline oceanographic and engineering data, in partnership with the County of Los Angeles and Corps.
- Peninsula Beach Feasibility Study: to determine the feasibility of beach restoration or shore protection measures, in partnership with the City of Long Beach and Corps.
- Surfside-Sunset Project: Stage 11 of a beach nourishment project, in partnership with the cities of Huntington Beach and Newport Beach, County of Orange, Surfside Storm Protection District and Corps.
- Huntington Beach Bluff Area Feasibility Study: to determine the feasibility of beach restoration and bluff erosion protection measures, in partnership with the City of Huntington Beach and Corps.
- Orange County Shoreline Feasibility Study: to determine the feasibility of beach restoration or shore protection measures, in partnership with the City of San Clemente, County of Orange and Corps.
- San Diego County Shoreline Feasibility Study: to determine the feasibility of beach restoration in the Oceanside Littoral Cell, in partnership with the City of Oceanside and Corps.
- Encinitas and Solana Beach Feasibility Study: to determine the feasibility of beach restoration or shore protection measures, in partnership with the Corps and cities of Encinitas and Solana Beach.
- Imperial Beach Plans, Engineering and Design (PED): to fund the plan, engineering and design stage prior to construction, in partnership with the City of Imperial Beach and Corps.

State Coastal Conservancy

Although beach erosion is primarily the responsibility of the DBW, the State Coastal Conservancy (SCC) has been involved in closely related issues, including restoring coastal streams and wetlands and developing public accessways. In March of 2000, the California voters passed Proposition 12. This proposition, placed on the ballot by the Legislature and Governor Davis, included significant new funding for the SCC of up to \$3 million for regional approaches to reducing beach erosion. The SCC determines its priorities for expenditure of the bond funds, including an appropriate level of spending for reducing beach erosion. The Public Beach Restoration Act requirements and continuing discussions within the CSMW have identified a number of potential projects and studies that may be appropriate for the SCC to undertake that would benefit the state's beaches. Projects or studies now under consideration include:

- Goleta Beach: a "feeder beach" nourishment project that would protect a public beach and park, in partnership with the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON).
- San Diego Association of Governments (SANDAG) regional nourishment project: biological studies to determine how to preserve critical habitat while nourishing beaches on a regional scale, in partnership with SANDAG.
- Opportunistic use of dredged materials from coastal wetland restoration projects: a study to determine ways to increase the use of materials from wetland projects to nourish beaches.
- Natural sand supply study: a study to determine where natural sand supply can be reestablished along the coast.
- Analysis of sand retention structures: a study to determine if structures can be built on beaches which retain sand while mimicking natural landforms and having only minimal visual or downcoast impacts.
- Chevron surfing reef: expansion of an experimental sand tube reef designed to increase a surf break while reducing beach erosion, in partnership with the Surfrider Foundation.
- Surfer's Point, Ventura: placement of cobbles on the beach to retain sand at the mouth of the Ventura River.

Department of Parks and Recreation

The Department of Parks and Recreation's (DPR) mission is to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation. The DPR manages over 280 miles of California's 1100-mile coastline through a State Park System that includes state parks, state beaches, and state reserves. Over 35 million people annually visit the department's coastal properties, making the DPR an important stakeholder in coastal resource protection, management and perpetuation, and coastal watershed restoration. The DPR is a steward to some of the most pristine ecosystems in the world, and some of the most heavily used recreational beaches.

DPR is working with a number of regional groups and other agencies that recognize the connection of coastal State Park System properties with the ocean ecosystem and greater landscape-scale land use issues to:

- Restore wetlands.
- Enhance critical habitats.
- Remove unnecessary roads and stream barriers.
- Restore watersheds to naturally functioning and self-maintaining states.

Collaborative projects are contemplated with the Corps, Department of Fish and Game, SCC, and National Park Service.

State Lands Commission

The State Lands Commission (SLC), which has jurisdiction over the sovereign lands of the state, supports the use of suitable material for beach enhancement. Many coastal projects require the leasing or permitting of sovereign lands for construction to be completed. Such projects can include those located along the existing shoreline as well as those located in wetland areas adjoining the coast. The SLC, through its permitting activities, allows for the use of state-owned minerals under its jurisdiction in publicly beneficial projects. The SLC can also authorize the installation of structures on its lands that provide a means of retaining material placed on beaches to enhance the shoreline. Some current projects include:

- Surfside-Sunset: dredging and deposition of sand material for beach replenishment.
- Cabrillo Power: deposition of dredge material as beach enhancement.
- City of Carlsbad – Batiquitos Lagoon: restoration with dredged material used for beach enhancement.
- SANDAG: regional beach enhancement involving dredging of State owned sand and placement on State property.
- City of Santa Barbara: harbor dredging and deposition of material for beach enhancement.
- City of Morro Bay: harbor dredging with material used for beach enhancement.
- City of Solana Beach: permission to place sand on existing beach to enhance beach profile.

California Coastal Commission

The California Coastal Commission (Coastal Commission) is a land use planning and regulatory agency with jurisdiction along much of the California coast. It is charged with carrying out the California Coastal Act. In conjunction with the San Francisco Bay Conservation and Development Commission and the SCC, the Coastal Commission is also responsible for the California Coastal Zone Management Program. Under these authorities, the Coastal Commission reviews and then approves, denies or concurs in most of the local, regional, state and federal sediment management projects in California. As a planning and regulatory agency, the Coastal Commission does not routinely initiate projects. However, several efforts that support regional sediment management are:

- Encouraging local governments to include regional sediment management in local coastal programs (for example, the regional cumulative impact studies for the Monterey Bay and Malibu);
- Co-sponsoring a two year study to develop a methodology for identifying technically feasible beach nourishment sites, undertaken in conjunction with the DBW and the National Oceanic and Atmospheric Administration.
- Requiring that those projects that interrupt coastal sediment supplies or encroach onto the beach provide mitigation for those impacts, by contributing to the regional beach nourishment program active in their area.

Department of Fish and Game

The Department of Fish and Game (DFG) is the state's trustee agency for fish and wildlife. As such, the DFG must evaluate natural processes (e.g., coastal erosion) and the placement of human-made structures (e.g., seawalls) or other remedial measures (e.g., sand replenishment) that may impact marine habitats for the short- and long-term effects on associated species. The DFG provides early consultation on these proposals under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), and reviews and provides comments and recommendations on CEQA/NEPA documents as well as permits and certifications from the Coastal Commission, SLC, regional water quality control boards, and Corps.

The DFG participates in the CSMW to emphasize fish and wildlife concerns in the planning phases of regional approaches to coastal protection, enhancement, and restoration. The DFG is reviewing and/or consulting on the following coastal sediment management-related projects with respect to fish and wildlife concerns:

- Port San Luis Rey: maintenance dredging.
- Ventura Harbor: 6-year dredging project.
- Channel Island/ Port Hueneme Harbor: maintenance dredging.
- Marina del Rey Harbor: maintenance dredging.
- City of Long Beach: maintenance dredging with local disposal.
- Oceanside Harbor: maintenance dredging with sand replenishment.
- Ballast Point: dredging, with beach nourishment at Imperial Beach, in partnership with the U.S. Coast Guard.
- Oceanside: beach nourishment in conjunction with the U.S. Navy Homeporting Project.
- Santa Barbara and Ventura Counties: the BEACON Sand Replenishment Program.
- Malibu: coastal sediment placement (sand from inland catch basins), in partnership with the County of Los Angeles.
- City of Long Beach: beach nourishment.
- Surfside-Sunset: beach nourishment (Alamitos Bay Area - Long Beach and Orange Counties).
- San Clemente: Beach Replenishment Program.
- Marblehead: Coastal Beach Replenishment Project.
- Carlsbad: Opportunistic Beach Fill Program.
- City of Solana Beach/Fletcher Cove/Tide Beach Park: beach replenishment.

- San Diego: the SANDAG Regional Beach Sand Replenishment Project.
- Mission Bay Park: shoreline stabilization and restoration.
- Kellogg Beach, San Diego: beach replenishment.
- Chula Vista Bayside Park: revetment and beach replenishment.
- City of Coronado: erosion control project.
- Harbor Island East Basin, San Diego: erosion control project.

Future Directions

The initial focus of the CSMW has been on improving state and federal coordination of coastal sediment management projects through discussions about state needs and priorities and Corps project authorities and capabilities. Perhaps the most important service that the group can provide in the short-term is a regularly scheduled forum for member agencies to meet and discuss projects and issues related to coastal beaches and watersheds to increase awareness of existing and planned activities.

Intermediate goals include expanding participation in the CSMW to include a more balanced representation of the various groups involved in coastal sediment management in California, including not-for-profit and other non-governmental organizations, as well as the general public. One method for doing this may be through public workshops, which could occur in conjunction with existing events, such as coastal conferences and public meetings sponsored by government agencies. Another intermediate goal is developing a project clearinghouse that would list specific projects and project areas for which funding is needed. The CSMW would use the clearinghouse to work with other state and federal agencies and interested stakeholders to improve project cost- and management-sharing opportunities throughout the state. The CSMW also plans to help educate both the general public and local and regional governments about current coastal sediment management efforts in California, and solicit input for identifying ways to fund projects and improve the management of the state's coastal beaches and watersheds.

The ultimate goal of the CSMW is improved coastal beach and watershed management. Key to achieving this goal is creating a comprehensive, statewide, coastal sediment management plan that has the support of the member agencies and stakeholders. The sediment management plan would be an issue-driven collaborative effort between federal and non-federal partners. Such a plan would identify linkages between the Corps' multiple responsibilities and state, regional and local programs, while at the same time lay the groundwork for a strong partnership with non-federal stakeholders to constructively identify and implement regional coastal sediment management strategies.

Appendix A: The CSMW Representation and Membership

Federal Participation

U.S. Army Corps of Engineers, South Pacific Division
U.S. Army Corps of Engineers, San Francisco District
U.S. Army Corps of Engineers, Los Angeles District

State Participation

California Resources Agency
California Coastal Commission
Department of Boating and Waterways
Department of Fish and Game
Department of Parks and Recreation
State Coastal Conservancy
State Lands Commission

Local Participation

California Coastal Coalition, whose members include:

BEACON	Bettencourt & Associates
AMBAG	Building Industry Association of Southern California,
SANDAG	Orange County Chapter
County of Los Angeles	California Shore & Beach Preservation Association
County of Monterey	Cardiff-By-The -Sea Chamber of Commerce
County of Orange	Carlsbad Convention and Visitors Bureau
County of San Diego	CH2M HILL
County of Ventura	Coastal Frontiers Corporation
Orange County Sanitation District	Coastal Planning and Engineering, Inc.
City of Carlsbad	Concept Marine Associates
City of Carpinteria	Downtown Encinitas MainStreet Association
City of Coronado	Eco-Systems Management Association, Inc.
City of Dana Point	Encinitas Chamber of Commerce
City of Del Mar	Evans Hotels
City of Encinitas	Everest International Consultants, Inc.
City of Hermosa Beach	Faria Beach Homeowners Association
City of Huntington Beach	Group Delta Consultants
City of Imperial Beach	Headlands Reserve, LLC
City of Laguna Beach	Hearthside Homes
City of Long Beach	KEA Environmental, Inc.
City of Los Angeles	Komex-H2O Science, Inc.
City of Malibu	MEC Analytical Systems
City of Manhattan Beach	Manchester Resorts
City of Morro Bay	Moffatt & Nichol Engineers
City of Newport Beach	Noble Consultants
City of Oceanside	Ogden Environmental & Energy Services
City of Pacific Grove	Playa Vista
City of Pismo Beach	Restaurant Row Business Association
City of Port Hueneme	ReStore the Shore
City of Redondo Beach	San Diego Gas & Electric
City of San Buenaventura	San Diego North Convention & Visitors Bureau
City of San Clemente	Seacoast Preservation Association
City of Sand City	Sea World
City of Santa Cruz	Self-Realization Fellowship Church
City of Santa Monica	Siemon, Larson & Marsh
City of Seal Beach	Skelly Engineering
City of Solana Beach	Southwest Community Bank
American Coastal Coalition	TEG International
American Shore & Beach Preservation Association	Taylor Woodrow Homes

Appendix B: Letters Establishing CSMW in California



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS

333 Market Street, Room 923
San Francisco, California 94105-2195

NOV 15 1999

Directorate of Engineering
and Technical Services
Planning Division

Mary D. Nichols
Secretary
Resources Agency of California
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Secretary Nichols:

This letter is in response to a presentation given by the California Department of Boating and Waterways on June 9, 1999, to Secretary Westphal, and the South Pacific Division of the U.S. Army Corps of Engineers. The presentation primarily concerned the State's shore protection needs and the need for more Federal, State, and local investments.


As a result of the presentation, subsequent meetings have taken place with representatives from the Corps, your Ocean Resources Management Program, several Resources Agency departments, and a representative of local government. A consensus was reached by the participants that it would be in the public interest to form a work group to discuss California's short- and long-term coastline management needs and to identify the ways in which the Corps can assist the State, regional and local agencies in those efforts. The initial focus of the group will be to address sediment transport (movement of sand to and along beaches) and related coastal management issues.

It is envisioned that a future product of the work group might include a framework agreement for improving the coordination and communication of coastal resource management projects and programs. In addition, depending on the issues defined and potential solutions, other appropriate resource agencies may be invited to participate. I hope you will agree that forming this work group would be a positive step in utilizing the Corps' authorities in cooperation and coordination with State, regional and local agencies to address the stewardship of California's coastline.

-2-

Please let us know whether you concur with the establishment of this work group.
We look forward to working more with you and your staff.

Sincerely,



Thomas J. Hodgini
Colonel, Corps of Engineer
Acting Division Commander

The Resources Agency

Gray Davis
Governor



Mary D. Nichols
Secretary

of California

California Conservation Corps • Department of Boating & Waterways • Department of Conservation
Department of Fish & Game • Department of Forestry & Fire Protection • Department of Parks & Recreation • Department of Water Resources

December 15, 1999

Thomas J. Hodgini
Colonel, U.S. Army Corps of Engineers
Acting Division Commander, South Pacific Division
333 Market Street, Room 923
San Francisco, CA 94105-2195

Dear Colonel Hodgini:

Thank you for your recent letter regarding the formation of a workgroup to address coastal sediment transport issues in California. We agree that such a workgroup could be helpful in identifying ways to better utilize the Corps' authorities to address the stewardship of California's coastline.

My Ocean Program staff and representatives from the Department of Boating and Waterways, Department of Fish and Game, Department of Parks and Recreation, Coastal Commission, State Lands Commission, San Francisco Bay Conservation and Development Commission, and Coastal Conservancy will continue to participate in this effort. While the initial focus on sediment transport and related management issues is good, I would suggest that in the future we might consider broadening the workgroup's participants and issues to be addressed. I am particularly interested in evaluating further partnership approaches to such issues as wetlands restoration and habitat enhancement.

We look forward to working with your staff and others to identify ways the Corps can assist State, regional and local agencies with coastline management needs in California.

Yours sincerely,

A handwritten signature in black ink that reads "Mary D. Nichols".

Mary D. Nichols
Secretary for Resources

The Resources Agency 1416 Ninth Street, Suite 1311 Sacramento, CA 95814 (916) 653-5656 FAX (916) 653-8102
<http://ceres.ca.gov/cra/>

California Coastal Commission • California Tahoe Conservancy • Coachella Valley Mountains Conservancy • San Joaquin River Conservancy
Santa Monica Mountains Conservancy • Colorado River Board of California • Energy Resources Conservation & Development Commission
State Coastal Conservancy • State Lands Commission • State Reclamation Board • Native American Heritage Commission
San Francisco Bay Conservation & Development Commission

Appendix C: Mission, Goals and Objectives

Mission

To facilitate regional approaches to protecting, enhancing and restoring California's coastal beaches and watersheds through federal, state and local cooperative efforts.

Goals and Objectives

Goal A. Coordinate California's coastal beach and watershed restoration, protection and enhancement efforts with local, state and federal stakeholders and programs.

Objective A-1. Identify and pursue cooperation and funding for studies and projects that are found to be in the best interests of all stakeholders.

Objective A-2. Establish objective, defensible, Pacific-focused criteria to evaluate coastal beach protection, restoration and enhancement projects.

Objective A-3. Contribute to a clearinghouse for information about existing and future coastal beach and watershed protection, restoration and enhancement projects, including each participant's current and future studies, resource management planning, and projects relating to ocean, coastal and watershed resources.

Objective A-4. Conduct a gap analysis using the clearinghouse information to identify unmet projects needs.

Objective A-5. List of coastal sediment management needs from the local, state and federal perspective.

Goal B. Better coordinate coastal sediment management and beach nourishment activities with related ongoing watershed management, habitat restoration and protection, water quality enhancement, resource sustainability, and urban waterfront planning efforts.

Objective B-1. Work with other related groups, including university researchers, to support unified approaches to sediment management in and along coastal watersheds and beaches.

Objective B-2. Work with existing related groups to encourage the development of regional sediment management plans and prepare a framework for these plans, if applicable.

Objective B-3. Encourage the use of available sand for approved, cost-effective and environmentally-sound beach nourishment projects.

Objective B-4. Develop an early communication mechanism to alert interested stakeholders about projects for coastal beach and watershed protection and restoration.

Goal C. Identify components necessary to develop collaborative approaches to well-conceived, environmentally-sound coastal sediment and watershed management projects.

Objective C-1. Consistent with existing agency mandates and responsibilities, unify paperwork and permit information requirements.

Objective C-2. Develop guidelines for coastal monitoring programs and resource inventories.

Objective C-3. Encourage and support research for expanding the existing knowledge of biological effects of beach nourishment and protection activities, including the development of statewide coastal baseline biological conditions.

Objective C-4. Identify successful coastal sediment management policies and programs that support coastal beach and watershed protection and restoration, and work to resolve impediments on a regional basis.

Goal D. Increase awareness of state and federal coastal beach and watershed protection, restoration and enhancement policies, programs and activities among local and regional governments.

Objective D-1. Identify the multiple state and federal coastal beach protection and restoration policies, mandates, authorities, programs, and activities of which local and regional governments should be aware.

Objective D-2. Prepare a simple and easy-to-read summation of such policies, programs and activities.

Objective D-3. Provide program information to the local and regional governments most likely to participate in coastal beach and watershed protection, restoration and management.

Objective D-4. Maintain a publicly accessible database of material and government contacts for further participation in shore protection, restoration and enhancement.

Objective D-5. Support existing and future efforts for a statewide GIS that would be dynamically available to all stakeholders.

Objective D-6. Perform outreach activities, such as participation in workshops and conferences and the creation of an information web site, with local and regional officials for feedback and direction.

Objective D-7. Initiate a dialogue with policy makers, program managers and interested stakeholders about environmentally-sound coastal sediment management.